# Arizona Drought & Climate Outlook

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State Climate Office

Arizona State University

**Intermountain West Drought Early Warning Systems**
**September 20, 2016**

ARIZONA STATE CLIMATE OFFICE

# Arizona Drought Monitoring Technical Committee



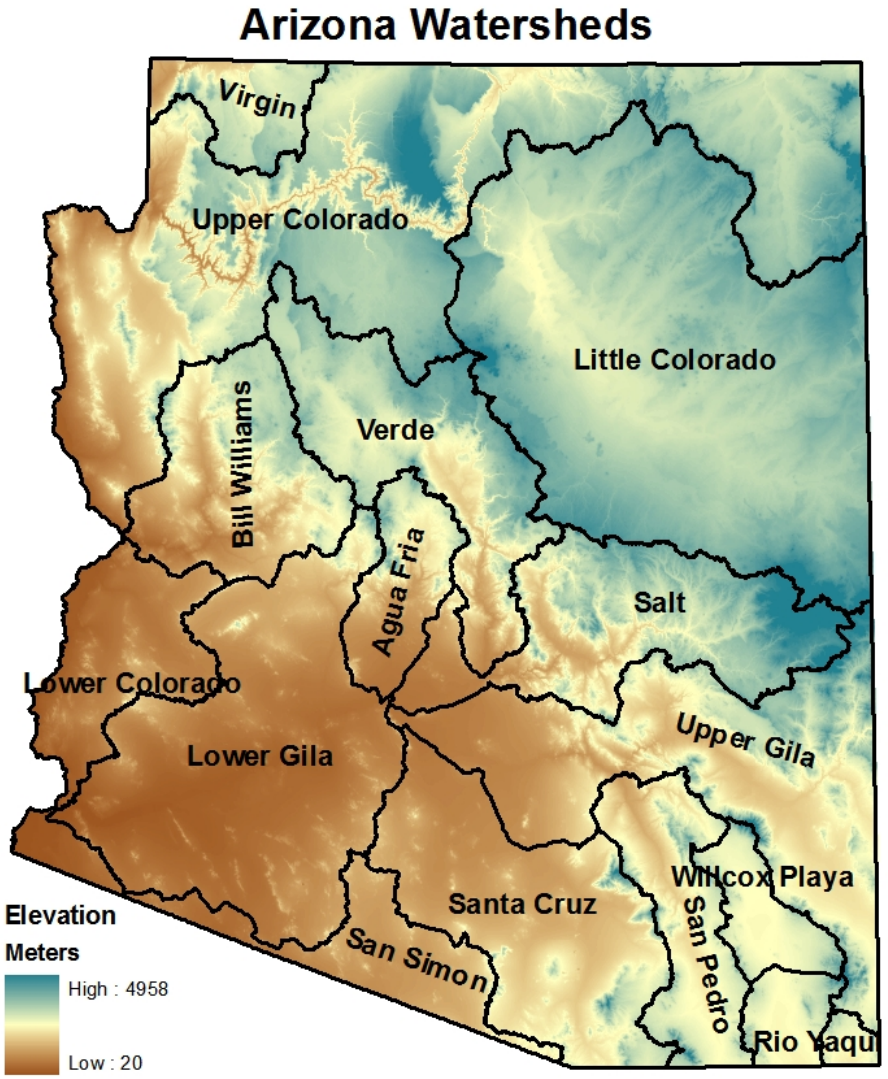







# Arizona's Watersheds

Outside the Salt-Verde watershed, surface water storage is minimal. Most of the state relies on pumping groundwater.

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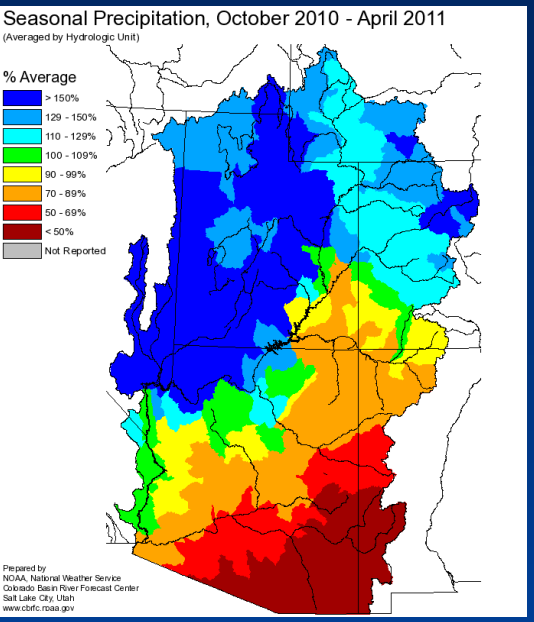
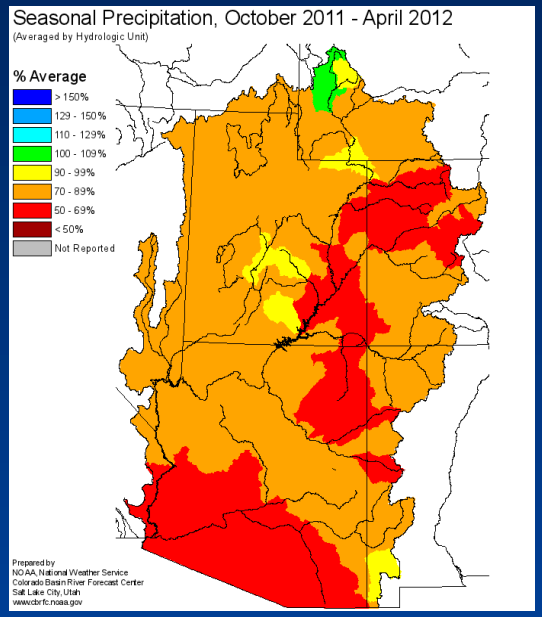
# Precipitation Comparison Colorado River Basin

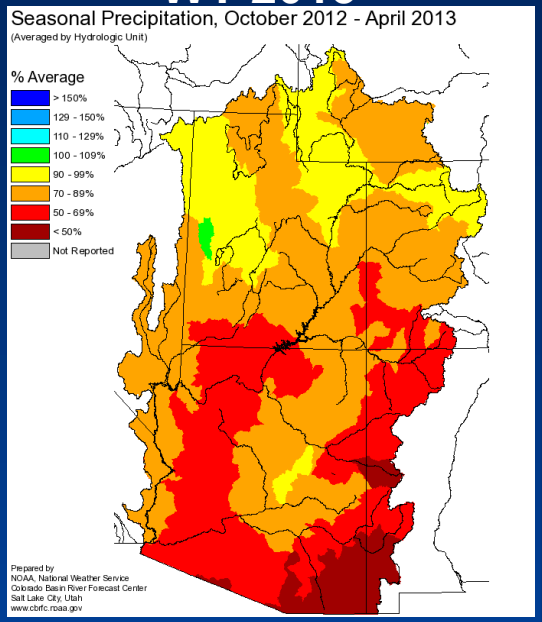
## WY 2011



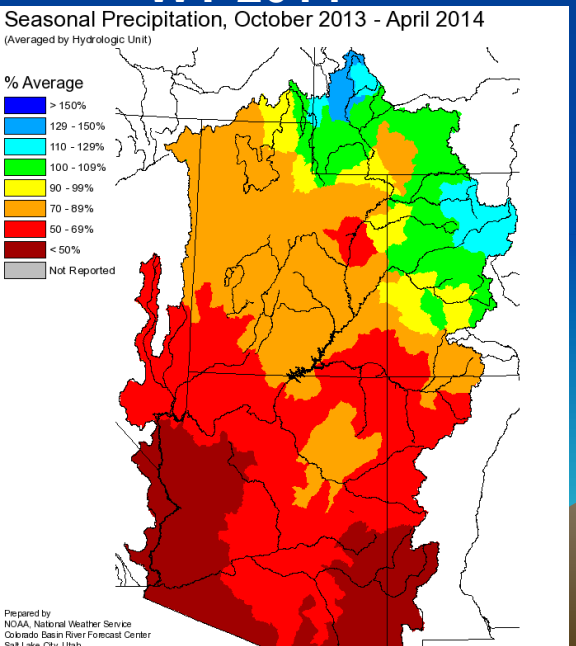

## WY 2012



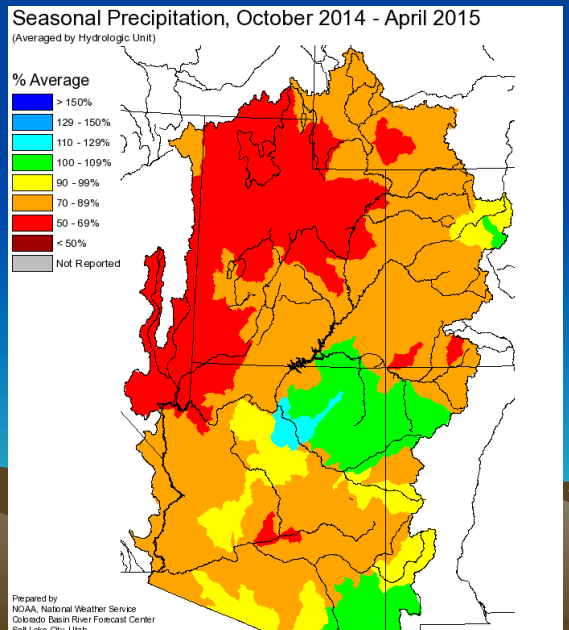

## WY 2013



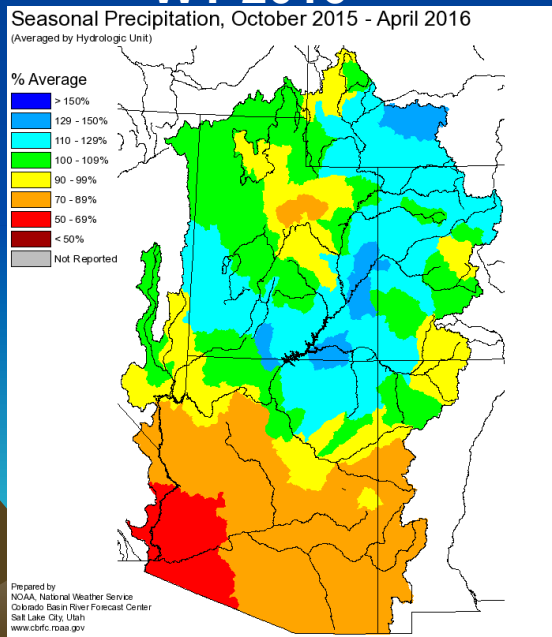

## WY 2014




## WY 2015

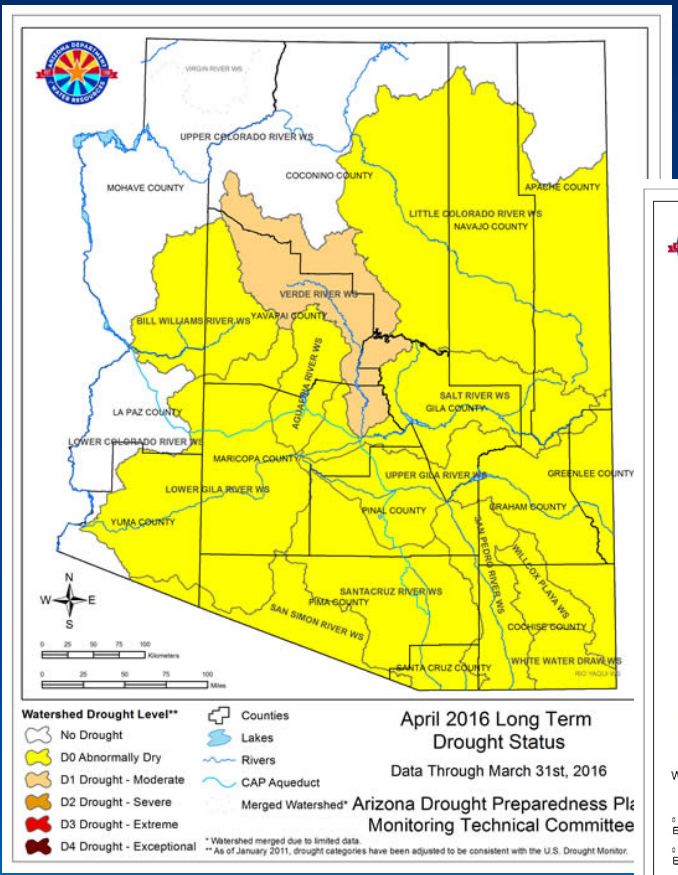



## WY 2016

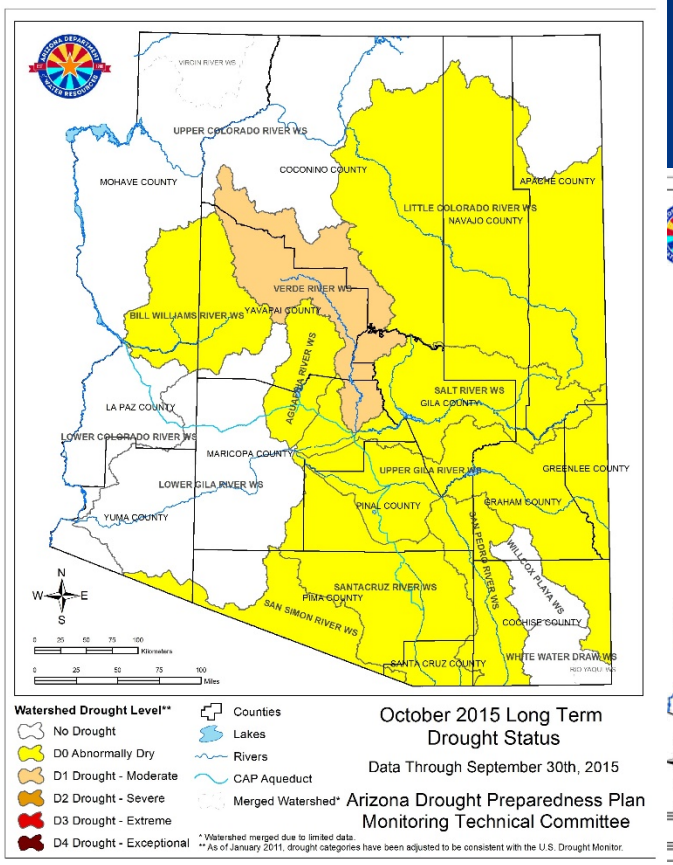


# Long Term Drought Status Comparison

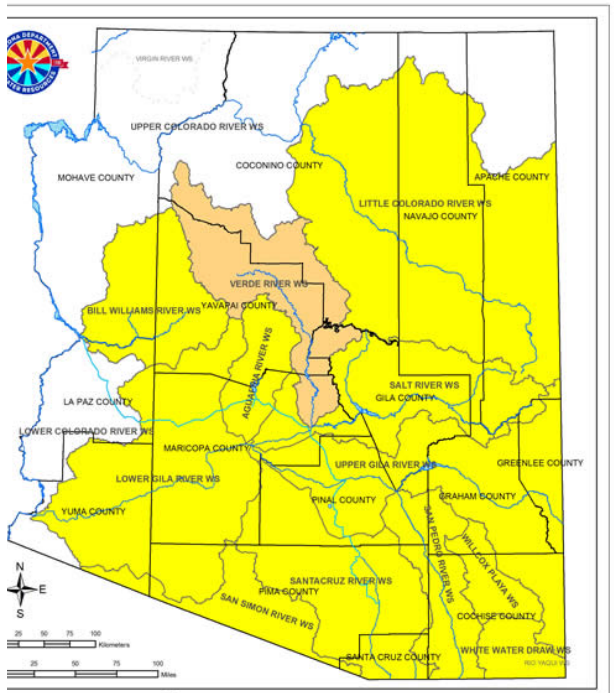
## Apr 2015




## Oct 2015



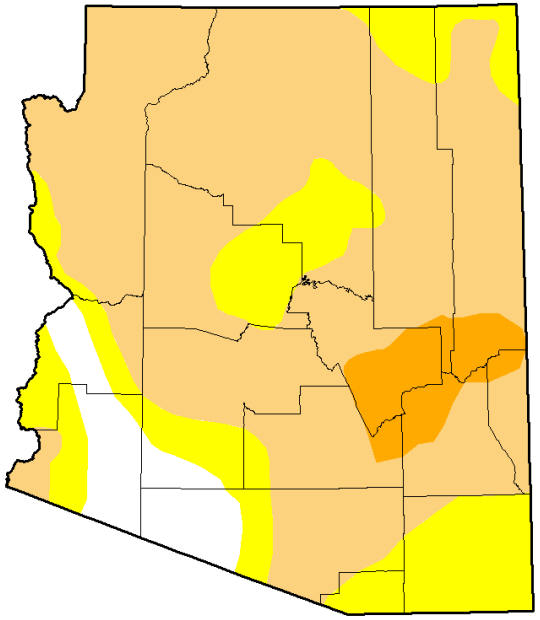

## Apr 2016



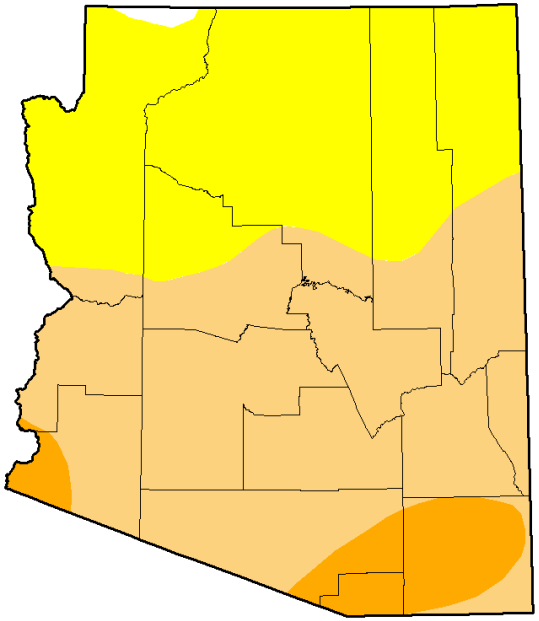

**Based on 24-, 36- and 48-month SPI and streamflow**

# Short-term Drought Status Comparison

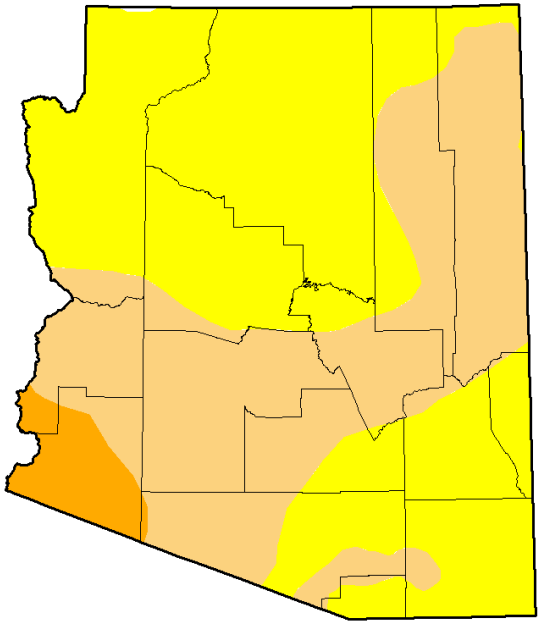
Sept 15, 2015



June 14, 2016



Sept 13, 2016



Based on 3-, 6- and 12-month SPI and impacts information

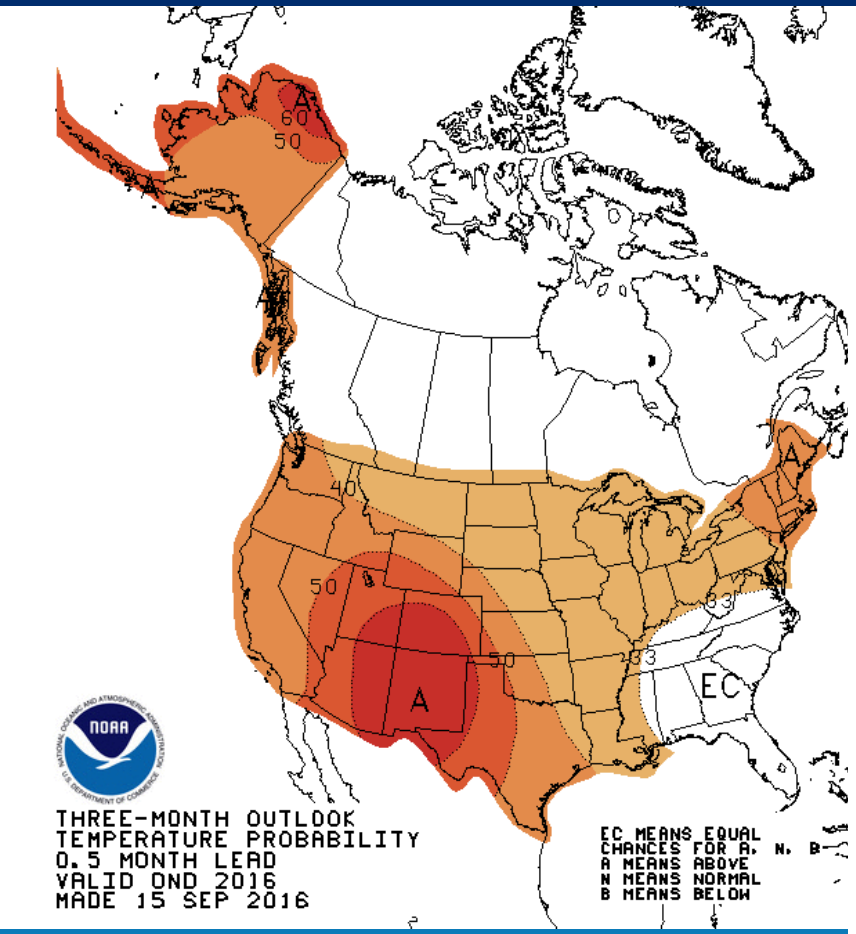
# Drought Status

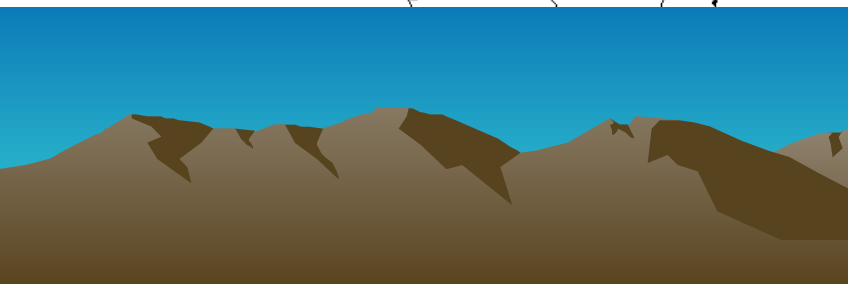
- Depends not just on precipitation and SPI, but on impact information (hard to come by) and timing.
- For short term drought we consider rangeland conditions and timing is critical for green-up.
- For long-term drought we consider water resources – so a wet monsoon isn't nearly as important as a wet winter.
- The DM does not always meet our AZ goals.

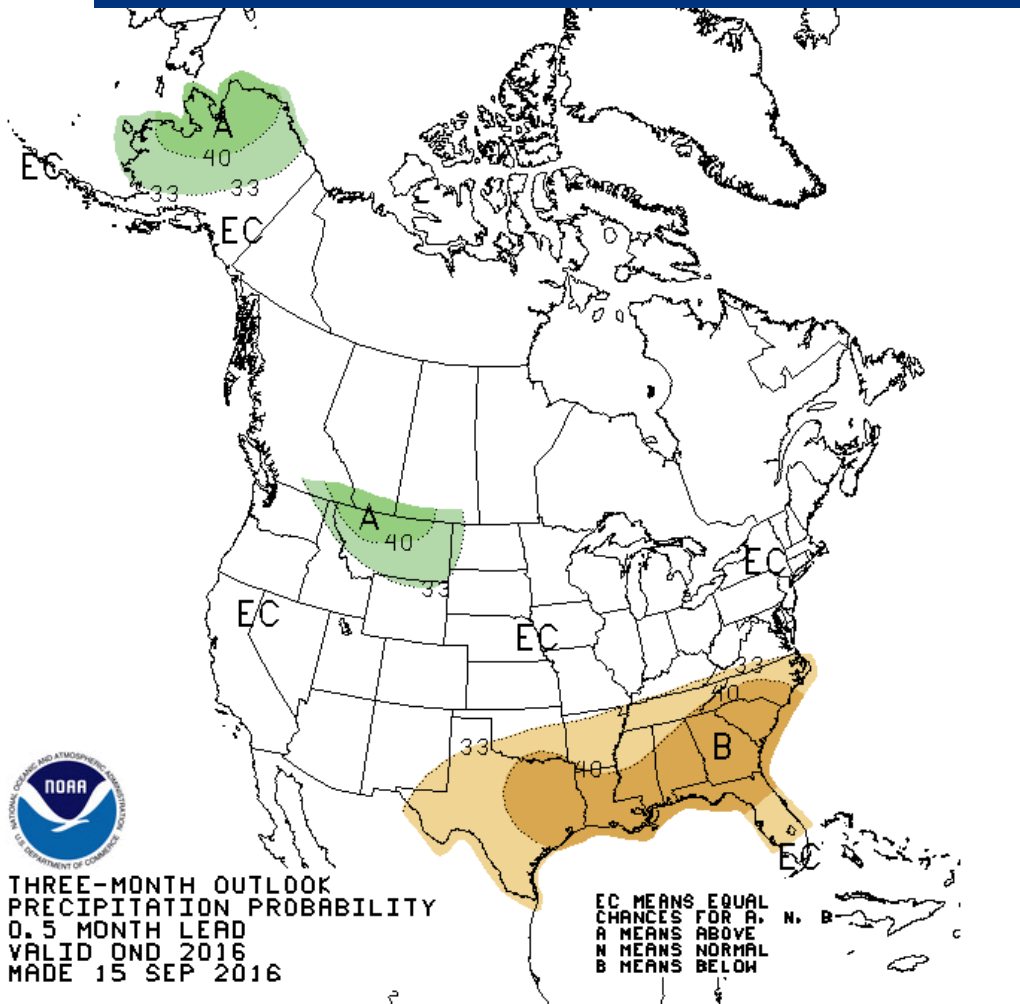
# Drought Status

- Since ~ 5 million of our 6 million residents live in the Phoenix area, where surface water is a major component on the portfolio, and no restrictions have been instituted, except in 2002, drought is difficult to explain.
- The rest of the state depends on groundwater and some CAP water, so drought is a more pressing concern.

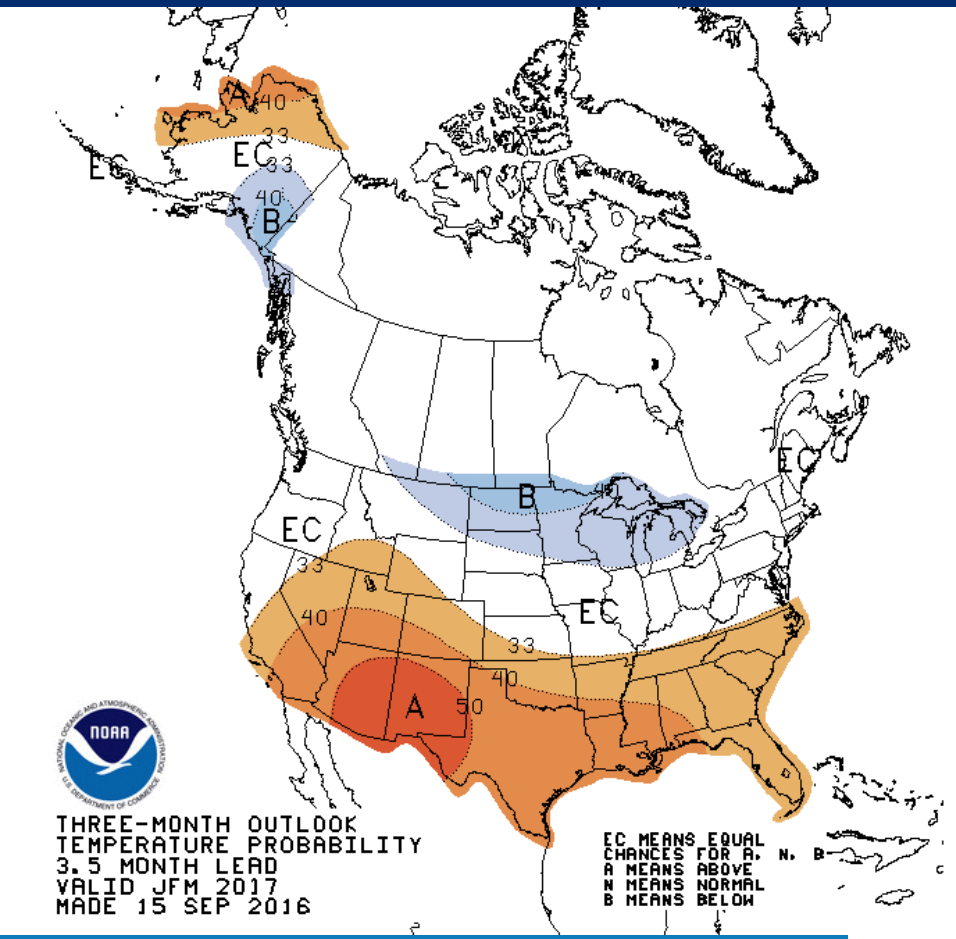
# Oct-Dec 2016 Outlook

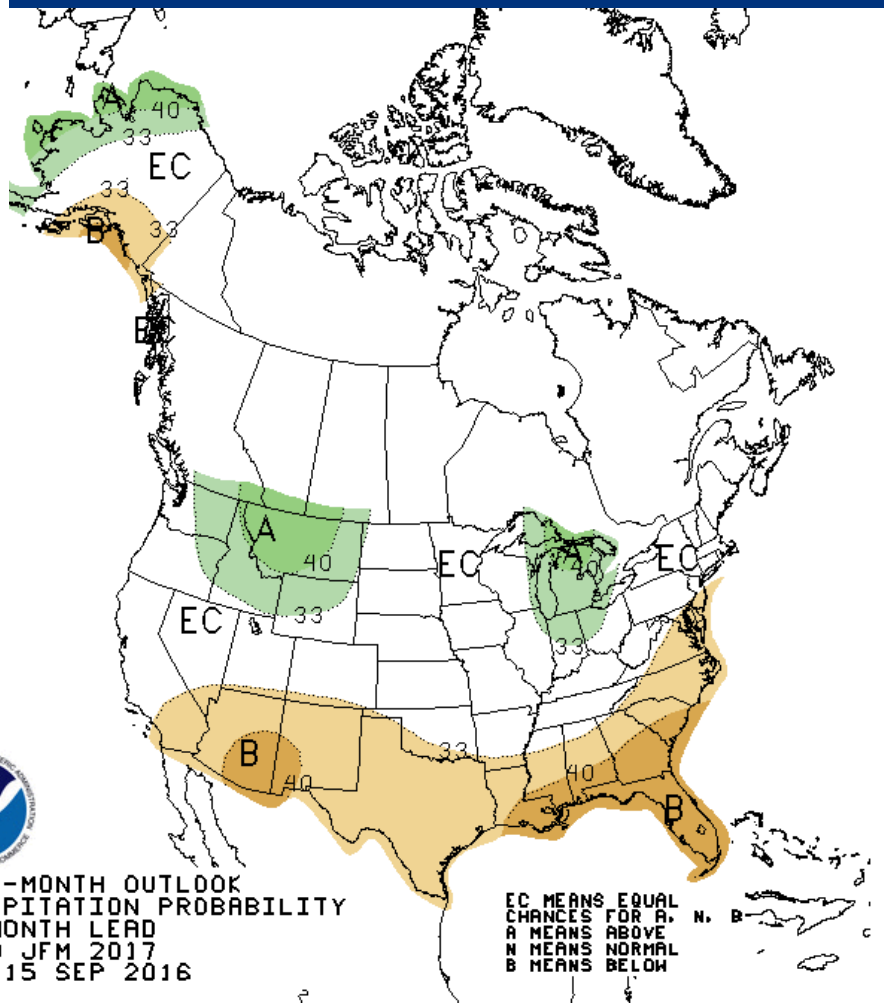




# Jan-Mar 2017 Outlook



# Thank you!

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